

BERENYI, Denes; SOMOGYI, Antal

The 9th Itinerant Meeting of Hungarian Physicists, 1962.
Fiz szemle 12 no.12:357-360 D '62.

1. Magyar Tudomanyos Akademia Atommag Kutato Intezete; "Fizikai Szemle" szerkeszto bizottsagi tagja (for Berenyi). 2. "Fizikai Szemle" szerkeszto bizottsagi tagja (for Somogyi).

S/137/62/000/010/009/028
A052/A101

AUTHORS: Kókény, László, Somogyi, Antal

TITLE: The drawing mill and the method of cold and hot tube and shape drawing, as well as the method of controlling the mill

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 10, 1962, 36,
abstract 10D922P (Hungarian pat., no. 148628, Nov. 30, 1961)

TEXT: In order to double the efficiency of a drawing mill by eliminating the idle run, the patented design provides for a hydraulic drive mounted in the middle of the mill symmetrically relative to two die plates with draw plates. The piston has 2 rods, arranged on the opposite sides, to which the drawing carriages with grips are fixed. When the piston travels to the right or to the left, the broaching on the mill is conducted through one draw plate (the left one) and the idle run of the carriage proceeds towards the other draw plate. 2 draw plates can be mounted on a die plate, and each carriage is furnished with two automatic grips. The hydraulic drive is controlled by means of a plug-type crane with a stuffing-box seal. Four holes in the crane plug arranged in

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The drawing mill and the method of...

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intersecting planes make it possible to direct (to divert) the working liquid into the right or the left working part of the cylinder.

V. Zhuravskaya

[Abstracter's note: Complete translation]

Card 2/2

SOMOGYI, Adam, ins.

Preservation of eggs by polyvinyl alcohol coating and thermal
stabilization of the white. Prum potravin 14 no. 3:146-147 Mr '63.

1. Vychodoslovenske mlekarne, n.p., Kosice.

SCM CEE 87-4

Distr: 4E2c(j)/4E3b

The mechanism of rate-acceleration in radiation-grafting of polymers.¹ J. Dubó and A. Szigonyi (Inst. Recherches Chim. Org. Matières Plastiques, Budapest, Hung.). J. chim. phys. 56, 863-8 (1959).—The rates of radiation-induced grafting of methyl methacrylate (I) and styrene (II) on "high pressure-type" polyethylene films (III) were studied. The systems were irradiated with 220-kv. x-rays. After ir-radiation the films were soaked in a solvent, the I coated in EtOAc and the II coated in benzene, to remove the homo-polymers. At a dose rate of 31,400 r./hr. the wt. of the films in a I-III system increased 68 times in 1 hr. at an instantaneous rate of 28,000%/hr., while homopolymerization of I was only about 3%/hr. The mol. wt. of the side chains was 2.3×10^6 . The gel and post-irradiation effects were eliminated as the sole causes of the acceleration phenomenon. It was shown that the rate was proportional to the amt. of polymer present at a given instant. Similar results were obtained in the II-III systems, but the rates were lower. However, due to the large ratio of $G_{\text{II}}/G_{\text{I}}$ (~ 10), this effect was attributed to another mechanism.

Richard Holtzman

4
1-22 (N/A)
2

DOBO, Janos; SOMOGYI, Agnes

On the mechanism of the acceleration occurring in the course
of irradiation grafting. Magy kem folyoir 65 no. 10:383-386
O '59.

1. Szerves Vegyipari es Muanyagipari Kutato Intezet, Budapest.

H/005/61/000/002/002/002
B124/B203

AUTHORS: Dobó, János, Somogyi, Ágnes, and Lakner, Endre

TITLE: Production of dye-absorbent Teflon by radiation-chemical graft copolymerization

PERIODICAL: Magyar Kémiai Folyóirat, no. 2, 1961, 85-90

TEXT: The grafting of styrene on Teflon was studied by A. Chapiro (Ref. 1: J. Polymer Sci., 34, 481, 1959), and that of other monomers on Teflon by A. J. Restaino (Ref. 2: Harwood: Effects of Radiation on Materials, Reinhold, New York, 1958, Chapt. XI; Ref. 3: A. J. Restaino and W. N. Reed: J. Pol. Sci., 36, 499, 1959); in the latter case, graft copolymerization and homopolymerization occurred at the same time. Ts. A. Sinitsyna, I. D. Tsvetkov, G. S. Bagdasaryan, and V. Voyevodskiy (Ref. 4: Dokl. Akad. Nauk, 129, 631, 1959) were the first to irradiate Teflon and immerse it into the monomer; thus, long-lived free radicals were formed on Teflon, and graft copolymerization of the monomer was initiated. A communication by the Radiation Application Co. (Ref. 5: Chem. Eng. News: 37/5, 44, 1959) mentions a procedure of radiation-chemical graft copolymerization ✓

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H/005/61/000/002/002/002
B124/B203 ✓

Production of dye-absorbent Teflon by ...

for the production of dye-absorbent Teflon without describing it in detail. Polymer and monomer were simultaneously irradiated by a 220-kv and 15-ma X-ray apparatus, in some cases by a Co^{60} radiation gun with an activity of 60 curie, with exclusion of oxygen. Results obtained are described in Ref. 6 (J. Dobó, Á. Somogyi: Journ. chim. Phys., 56, 863, 1959). Monomers used were styrene, methyl methacrylate (MMA), vinyl acetate (VAC), and vinyl pyridine (VP). To attain a given degree of grafting, the radiation dose required rises in the order: VAC, MMA, VP, styrene (Fig. 1). VP copolymers can be best stained with acid and acetate dyes, MMA copolymers worse, and sulfonated styrene copolymers worst. Thus, the use of VAC is most convenient. Grafting on Teflon is connected with auto-acceleration increasing with time (Fig. 2). The initial grafting rate is approximately proportional to the square root of the radiation intensity; grafting is accelerated by a temperature increase. Table 1 gives a survey of the dyeing of grafted copolymers; the data were obtained in a dyestuff bath within 1 hr and at 100°C, a 2% aqueous dyestuff solution, a 1% emulsifier solution, and benzene being used as carriers. Under these conditions, ungrafted foils were not stained at all. Slightly (below 2%) grafted foils were stained irregularly due to irregular grafting. Uniform,

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B124/B203

Production of dye-absorbent Teflon by ...

well-dyed foils were obtained by a 6-10% grafting with VAC, for example (Table 2). The penetration depth of dyes into the polymer foil is independent of diffusion, and represents the distribution of grafted polymer in the foil. The mechanical properties of Teflon deteriorate only slightly under the action of radiation (Table 3). The thermal stability of the dye depends on the grafted polymer and the dyestuff quality; with certain combinations, thermal stability is very high (Table 4). Grafting of Teflon proceeds at room temperature and medium intensities in the surface layer. János Mikes is thanked for assisting in photographing the microscopic sections. There are 3 figures, 4 tables, and 6 references: 2 Soviet-bloc and 4 non-Soviet-bloc. The three references to English-language publications read as follows: A. J. Restaino in "Harwood": Effects of Radiation on Materials, Reinhold New York, 1958, Chapt. XI.; A. J. Restaino and W. H. Reed: J. Pol. Sci., 36, 499, 1959; Chem. Eng. News: 37/5, 44, 1959.

ASSOCIATION: Budapest, Szerves Végyipari és Müanyagipari Kutató Intézet
(Budapest Research Institute of the Organic Chemical
Industry and Plastics Industry)

Card 3/12

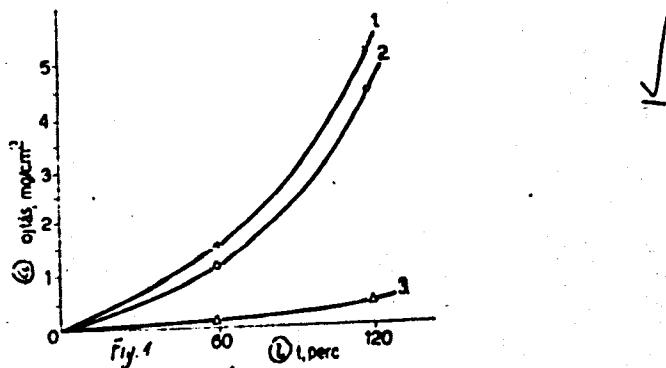
H/005/61/000/002/002/002
B124/B203

Production of dye-absorbent Teflon by ...

SUBMITTED: May 11, 1960

Legend to Fig. 1: Rate of grafting of various monomers on Teflon.

- (1) VAC, intensity 18750 r/hr,
- (2) MMA, intensity 18750 r/hr,
- (3) VP, intensity 37000 r/hr,
- (a) grafting, mg/cm²,
- (b) t, min.

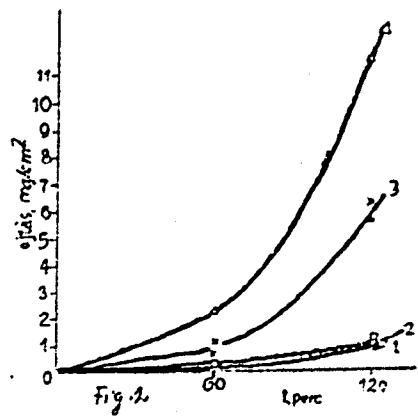


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H/005/61/000/002/002/002
B124/B203

Production of dye-absorbent Teflon by ...

Legend to Fig. 2: Grafting of VAC on Teflon at various temperatures. $I = 57000$ r/hr;
(1) 25°C , (2) 35°C , (3) 45°C ,
(4) 55°C .



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Production of dye-absorbent Teflon by ...

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B124/B203

Legend to Table 1: Dyeing of grafted copolymers. (1) Number of experiment, (2) monomer, (3) intensit^t, kr/hr, (4) time of irradiation, hr, (5) temperature, °C, (6) grafting, (7) dyestuff, (8) thickness of foil, mm, (9) thickness of the dyed layer on both sides of the section, mm, (10) not measurable, (11) discolored +, (12) pink, not measurable,
+) central part of foil (0.06 mm) only pink, ++) central part of foil (0.06 mm) brighter red, (a) Cibacete scarlet 2B, (b) Celliton fast scarlet B, (c) Cibacete yellow GV, (d) Cibacete green 5 GM, (e) Cibacete ruby, (f) Columbia red.

Card 6/12

SCMOGYI, Agnes (Budapest); GECZY, Istvan, a kemiali tudomanyok kandidatusa
(Budapest); DOBO, Janos (Budapest)

Synthetic linear polymers. IX. Radiation hydrated copolymerization
in presence of benzoyl peroxide-dimethylaniline. Kem tud kozl MTA
15 no.1:17-28 '61. (EEAI 10:6)

1. Szerves Vegyipari es Muanyagipari Kutato Intezet, Budapest es
Vegymuveket Tervezo Vallalat, Budapest.
(Polymers and polymerization) (Radiation)
(Hydration) (Dimethylaniline) (Benzoyl peroxide)

SOMOGYI, Agnes; DCBC, Janos

Preparation of polyethylene with stereoscopic structure obtained through radiation and its industrial application. Magy kem lap 17 no.2:78-79 F '62.

J. Muanyagipari Kutato Intezet,

DOBO, Janos; SOMOGYI, Agnes; LAMER, Endre

Synthesis of colorable teflon by means of radiation copolymerization.
Magy kem folyoir 67 no.2:85-90 F '62.

1. Szerves Vegyipari es Muanyagipari Kutato Intezet, Budapest.

DOBO, Janos; SOMOGYI, Agnes; KISS, Laszlo

Grafting on teflon. Magy kem folyoir 68 no.3:121-124 Mr '62.

1. Muanyagipari Kutato Intezet, Budapest

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652410011-0

SOMOGYI, Andrasne

Society news. Falpar 12 no.5: 160-163 of cover My'62

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652410011-0"

SOMOGYI, Andras

Designing up-to-date medium-frequency amplifiers for television
receivers. Hir techn 14 no.2:55-60 Ap '63.

1. Orion Radio es Villamosagi Vallalat.

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652410011-0

SOMOGYI, Andrasne

Society news. Faipar 12 no.3:95-96 Mr '62.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652410011-0"

KOCSIS, Geza; SCHOGGI, Antal; MOCSEI, Bela

Data on corrosion mechanism of enamels. Pt.1. Veszprem vegyip
egy kozl 6 no.2:157-164 '62.

1. Veszpremi Vegyipari Egyetem Szilikatkemia Tanszek.

LOCSEI Ela; KOCSIS, Geza; SOMOGYI, Antal

Technologic parameters of manufacturing tempered safety
glass. Veszprem vegyip egy kozl 6 no.3:243-250 '62.

1. Veszpremi Vegyipari Egyetem Szilikaokemia Tanszek.

SOMOGYI, A

ACTA PHYSICA ACADEMIAE
SCIENTIARUM HUNGARICAE
Vol VII, Nr 2

ON THE TRANSITION EFFECT OF EXTENSIVE
AIR SHOWERS

By

A. SOMOGYI

CENTRAL RESEARCH INSTITUTE OF PHYSICS OF THE HUNGARIAN ACADEMY OF SCIENCES,
DEPART. ENT FOR COSMIC RAYS, BUDAPEST

(Presented by L. Jászay. — Received 8. V. 1956)

From experimental results reported in a previous paper it is concluded that the ratio of the number of primary particles in an extensive shower, which are capable of producing at least one ionizing secondary beneath a given absorber, to the number of all ionizing particles (this ratio is called "transition factor") depends on the shower density. It follows further that the transition factor is a power function of the total number of particles contained in the shower with an exponent between 0 and 0.3 for thicknesses of lead absorber between 0 and 25 mm. This power function permits the determination of the average total number of particles contained in showers registered by the apparatus and the average distance of the shower axis from the apparatus.

RMI Conf

Somogyi, Antal

Category : HUNGARY/Nuclear Physics - Cosmic Rays

C-7

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3284

Author : Sandor, Tamas; Somogyi, Antal

Title : New Data on the Barometric Effect of Extensive Air Showers

Orig Pub : Magyar tud. akad. Kozp. fiz. kutato intez. kozl., 1954, 2, No 2,
165-170

Abstract : Survey article

Card : 1/1

Somogyi, Antal

Category : HUNGARY/Nuclear Physics - Cosmic Rays

C-7

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3283

Author : Koch, Jozsef; Sandor, Tamas; Somogyi, Antal; Szivek, Janos
Title : Measurement of Density Distribution in Extensive Air Showers

Orig Pub : Magyar tud. akad. Kozp. fiz. kutato intez. kozl., 1953, 1, No 1-2,
61-66

Abstract : Survey article

Card : 1/1

JANCSY L.

21(1)

PHASE I BOOK EXPLOITATION /J911

International Conference on Cosmic Radiation. Budapest, 1956.
 International Conference on Cosmic Radiation Organized by the
 Hungarian Academy of Sciences. Budapest, 1957. 187 p.
 500 copies printed.

Sponsoring Agency: Magyar Tudomanyos Akademia

Ed.: B. Pávics, and A. Szegedi

REPORT: This report is intended for geophysicists concerned with
 cosmic radiation.

CONTENTS: This report contains the six plenary sessions of the
 conference. Some of the problems dealt with include nuclear
 emulsions, extensive air showers and the program of cosmic
 ray measurements planned for the International Geophysical
 Year. Most of the reports are followed by references. Series
 editor-in-chief in the field of cosmic radiation who attended the
 conference are: B.L. Andronikashvili, J.A. Dobrotin, I.I.
 Gurevich, S.I. Mikolajcyk and S.I. Verner. The articles are
 written in English, German and Russian without parallel trans-
 lations.

MWV/J911

International Conference (Cont.)

- 3. Nitolovszky, S.J. The Study of Nuclear Active Components of Extensive Atmospheric Showers or Cosmic Rays 50
- 4. Verner, S.I., and Zatsepin, G.T. Height Dependence and the Problem of the Core of Extensive Atmospheric Showers (not incl.)
- 5. Chudakov, A.Ya. Cherenkov Radiation of Extensive Atmospheric Showers 57
- 6. Andronikashvili, B.L., and M.P. Bibilashvili. The Study of the Spatial Dispersion of Penetrating Particles of Extensive Atmospheric Showers 63

TWO-DIMENSIONAL

EXTENSIVE AIR SHOWERS

- 1. Baloghi, J.I., Jurkiewicz, and J.M. Matulski. The Transition Curves of the Electron-Photon Content of Extensive Air Showers in Lead Absorbers of Thicknesses Between 0 and 25 cm. 73
- 2. Janossy, L., T. Sandoz, and A. Szegedi. Investigation of Extensive Air Showers 250 m Above Sea Level 96

Card 36

SOMOGYI, ANTAL

HUNGARY/Nuclear Physics - Cosmic Rays

C-7

Abs Jour : Ref Zhur - Fizika, No 12, 1958, No 27042

Author : Dohun Istvan, Genesay Tibor, Sandor Tamas, Somogyi Antal

Inst : Not Given

Title : Determination of the Ratio of the Number of Photons to the Number of Electrons in Extensive Cosmic Showers with the Aid of a Cloud Chamber.

Orig Pub : Magyar tud. akad. Kozp. fiz. kutato int. kozl., 1957, 5, No 5,
461-468

Abstract : The investigations were carried out with a cloud chamber having an effective transverse section of 300 cm^2 , in which seven plates of lead 33 mm thick each were placed. The chamber registered an extensive shower. During the interpretation of the resultant photographs, a count was taken both of the electrons entering into the chamber and of the electron pairs produced by the photons in lead. Taking into account the possible number of photons passing through the chamber without interacting, the ratio of the number of photons to the

Card : 1/2

19
INT. 581.1
4506. ON THE PHOTON COMPONENT OF EXTENSIVE AIR
SHOWERS. J. Lefevre, T. Mihail and A. Somorjai.
Acta phys. Hungar., Vol. 6, No. 3-4, 1957.

Extensive air shower measurements carried out simultaneously

with counter batteries of different areas are reported. All the four counter batteries were covered with absorbers of different materials and thicknesses. The spectrum of the effective density (i.e. that of the primaries capable of producing at least one ionizing secondary beneath the absorber) turns out to vary with the material and thickness of the absorber. This means that the transition effect apparently depends on the nature of showers selected with different counter areas.

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Somogyi, A.

HUNGARY/Nuclear Physics - Cosmic Rays

C-7

Abs Jour : Ref Zhur - Fizika, No 2, 1958, No 3041

Author : Somogyi, A.

Inst : Central Research Institute of Physics, Hungarian Academy of Sciences, Budapest

Title : On the Transition Effect of Extensive Air Showers

Orig Pub : Acta phys. Acad. sci. hung., 1957, 7, No 2, 189-197

Abstract : The author has shown previously that the transition effect of extensive air showers depends on the surface area of the counters that select the showers. In this case an analysis is given of the possible causes of this phenomenon. It is shown that series of counters with different surfaces select showers whose axes, at least in the first approximation, are at the same distance from the setup but the total number of particles selected by the various counter surfaces of the various showers is different. On the basis of this it is possible to determine the dependence of the transition factor on the number of particles in the shower.

Card : 1/1

Document number - - -

Abs Jour : Ref Zhur Fizika, No 9, 1959, 19898
Author : Sandor, Tamas; Somogyi, Antal; Telbisz, Ferenc
Inst : -
Title : Semi-Cubic Telescope of Counters for the Measurement
of the Variation of the Intensity of Cosmic Radiation
Underground in Accordance with the Program of the
International Geophysical Year (Preliminary Results)
Orig Pub : Magyar tud. akad. Kozp. fiz. kutato, int. kozl., 1958,
6, No 3, 117-128, III - IV

Abstract : During the International Geophysical Year, the authors
have carried out the registration of the variations of
the intensity of cosmic radiation at a depth of approxi-
mately 40 meters water equivalent. For this purpose
use was made of two identical semi-cubic telescopes
operating independently of each other. On the basis
of 18.5×10^6 coincidence events, registered from 20

Card 1/2

SOMOGYI, A.

SCIENCE

Periodicals MAGYAR FIZIKAI FOYOIRAT Vol. 6, no. 4, 1958

SOMOGYI, A. Registering the intensity of cosmic radiation at a 7.0-meter depth. p. 295.

Monthly List of East European Accessions (EEAI) LC. Vol. 8, No. 5,
May 1959, Unclass.

SOMOGYI, A.

P
Further investigation of extensive air showers containing
nuclear charged particles. Gyorgy Bozoki, Ervin Penyves,
Tamás Sándor, and Antal Somogyi. Magyar Tudományos
Akad. Körponisi Fiz. Kutató Intézetnek Közleményei 6,
433-8/1958).—Exptl. arrangements described here are
identical with those described previously (C.A. 53, 6819f).
Measurements were extended to the use of thicker absorbers,
40, 60, 80 cm. The d. spectrum of the electron component
and the incoherency curve of the nuclei of the shower
were found to be independent of the thickness of the Pb
absorbers.
B. Rose

Card 1/1

aht

5

112

Somogyi, A.

Distr: 4E3d/4E3c

Two events of mesonic decay of hyperfragments in flight.
A. Filipkowski, L. Skarlicki, A. Somogyi, and A.-
Wroblewski (Inst. Nuclear Research, Warsaw). *Nuclear
Phys.*, 7, 643-6 (1958).—Calens. are given of 2 mesonic de-
cays found in a stack of Ilford G5 emulsions, which were
exposed to a 300-m.e.v./c K^- beam from the Berkeley
bevatron. Norman E. Pickering

6
1RS
2

Distr: 4E3c/4E3d

✓Investigation of extensive air showers containing nuclear active particles. G. Bogáti, E. Fenyves, T. Sánder, and A. Somogyi (Central Research Inst. Phys., Budapest, Hung.). *Nuclear Phys.* 7, 677-88 (1959).—The exponent of the d. spectrum of the electronic component of extensive air showers contg. nuclear active particles was detd. to be $\gamma = 1.34 \pm 0.08$, by assuming that the d. of nuclear active particles is proportional to the d. of electrons in air showers.

nm // Norman E. Pickering

SOMOGYI, Antal

Nuclear interactions of π^0 particles. Fiz szemle 8 no.1:32 Ja '58.

1. "Fizikai Szemle" szerkeszto bizottsagi tagja.

SOMOGYI, Antal

A new type hyper nucleus. Fiz szemle 8 no.2:68 1958.

1. "Fizikai Szemle" szerkeszto bizottsagi tagja.

C

HUNGARY/Nuclear Physics - Cosmic Rays.

Abs Jo r : Ref Zhur Fizika, No 9, 1959, 19886

Author : Dohan, I., Gemesy, T., Sandor, T., Somogyi, A.

Inst : Central Research Institute for Physics, Budapest, Hungary

Title : Determination of the Ratio of the Number of Photons and
Electrons in Extensive Atmospheric Showers of Cosmic
Radiation with the Aid of a Cloud Chamber.

Orig Pub : Acta phys. Acad. scient. hung., 1958, 9, No 1-2, 97-103

Abstract : Seven plates of lead with a total thickness of 33 mm were placed in a cloud chamber having an effective area of 300 cm². The chamber was controlled by means of apparatus for extensive atmospheric showers. The primary electrons and the electron-positron pairs were counted. Taking into account the correction necessitated by the penetrating photons, the authors have obtained the ratio of the

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HUNGARY/Nuclear Physics - Cosmic Rays.

C

Abs Jour : Ref Zhur Fizika, No 9, 1959, 19886

number of photons to the electrons in extensive atmospheric showers, equal to 1.16 ± 0.04 .

Card 2/2

50m0671 A.

Identification of nonstopped particles in nuclear emulsions. I. Estimation of ionization range from averages of characteristic quantities on two sections of the track. S. Alper, J. Auslander, C. Bereta, E. Friedlander, and A. Somogyi. *Acad. rep. populare Romne, Inst. fiz. si mat. Sti., Studii cercetarii, 9, 185-9 (1958).*—Results on scattering measurements and gap counting that have been performed on 20 p, π , and μ tracks at given distances from the ionization range show that only in the favorable cases of the long tracks is it possible to establish in a statistically significant manner that the residual ionization range is different from zero. II. Residual ionization range estimation from gap measurements in nuclear emulsions. E. Friedlander. *Ibid.* 191-3.—The residual ionization range can be estd. from gap measurements, by applying a procedure of max. likelihood, with an accuracy given by the equation: $\sigma_{k_0^*} / A^* = N^{-1/2}$ $\alpha k_0^* = \chi(k_0^*, \alpha) / N^{-1/2}$, where $\chi(k_0^*, \alpha) = [2(k_0^* + k^*)]^{1/2} / [2(k_0^* + k^*)^{1/2} - 1]$, where k_0^* is the residual ionization range and A is a const. which depends on the mass of the particle and the properties of the emulsion. Results obtained on 15 p, π , and μ tracks confirm the correctness of the applied procedure. III. Mass estimation of nonstopped, ionizing particles in nuclear emulsions. S. Alper. *Ibid.* 195-202.—It is shown that by applying conventional const. sagitta schemes to tracks of nonstopped particles it is possible, by an appropriate statistical treatment, to obtain an improved mass estn., the accuracy being given by the equation: $\sigma_{D_0''} = 0.76N^{-1/2}(1 + U^2/4\Delta^2)^{1/2}$ in conjunction with the equation: $M = M_c(D_0''/D_c)^{1/2}$ where D_0'' is the value of the const. sagitta. Measurements on 8 π and μ tracks confirm the correctness of the applied procedure.

A. Berlin

463c

463d

b

Amf

3. 2410 (3215, 2705, 2805)

31525
S/627/60/002/000/007/027
D299/D304

AUTHORS: Gemezi, T., Shandor, T., and Shomogi, A.

TITLE: Study of extensive air showers by means of a cloud chamber

SOURCE: International Conference on Cosmic Radiation. Moscow, 1959. Trudy. v. 2. Shirokiye atmosfernyye livni i kaskadnyye protsessy, 113-116

TEXT: A Wilson cloud chamber is used for verifying the results obtained by means of Geiger counters, and for an exact determination of the ratio of photons to electrons in extensive showers. A cylindrical cloud chamber was placed at the center of a square, at whose corners 4 Geiger counters were set up. Some provisional results were published by the authors earlier (in 1958). About 9000 photos were taken, at a rate of approximately 2.7 photos per hour; half of these photos were already processed. The ratio of photons to electrons was found to be $\alpha = 1.13 + 0.03$. There was good agreement between the experimental values and the theoretical values

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D299/D304

Study of extensive air ...

based on cascade shower theory. The authors did not observe any substantial dependence of the photon-electron ratio on shower density, for a density range of 30 to 200 particles/m². The transition effect was investigated by two methods. The transition curve obtained by the cloud chamber had no maximum, whereas the curves obtained by means of the Geiger counters had a noticeable maximum at approximately 7 mm. lead. There is no final explanation to this contradiction as yet. It may be due to the different experimental conditions, existing in the cloud chamber and the Geiger counters, respectively. The authors started recently a new series of measurements in order to verify this assumption. Another explanation could be the presence of low-energy electrons, recorded by the cloud chamber but not by the Geiger counters. This explanation is, however, not fully satisfactory. There are 3 figures, 1 table and 3 non-Soviet-bloc references. The references to the English-language publications read as follows: L. Jánossy, T. Sándor and A. Sómogyi. Acta Phys. Hung., 6, 455, 1957; A. Somogyi. Ibid., 7, 189, 1957; I. Dóchán, T. Gémesy, T. Sándor and A. Somogyi. Ibid., 9, 97, 1958.

Card 2/3

Study of extensive air ...

31525
8/627/60/002/000/007/027
D299/D304

ASSOCIATION: Tsentral'nyy issledovatel'skiy institut fiziki Vengerskoy Akademii nauk (Central Research Institute of Physics Hungarian Academy of Sciences, Budapest)

Card 3/3

SANDOR, Tamas; SOMOGYI, Antal; TELBISZ, Ferenc

Atmospheric effects and periodicities of the cosmic radiations
measured 8m. underground. Foz fiz kozl MTA 7 no.4:199-202 '59.
(EEAI 9:8)

1. A magyar Tudomanyos Akademia Kozponti Fizikai Kutato Intezete,
Kozmikus Sugarzasi Osztaly.
(Cosmic rays)

LEBLITZ, I. J.; TOLK, J.

Mechanism of acceleration occurring during radiation grafting. p. 283.

HUNGARIAN POLYMER. (Magyar Kémiakosztalag Szemle) Budapest, Hungary
MAGYARORSZÁGI PÓLÍM. (Magyar Kémikusok Szemle) Budapest, Hungary
Vol. 68, no. 10, Oct. 1959.

Monthly List of East European Acces^sion (MEAI), 10, Vol. 1, no. 2, Oct. 1960

Uncl.

SOMOGYI, A.

PHASE I BOOK EXPLOITATION

SOV/4152

International Cosmic Ray Conference. Moscow, 1959.

Proceedings. v. IV: Variations of Cosmic Ray Intensity. Moscow, 1960.
365 p. Errata slip inserted. No. of copies printed not given.

Sponsoring Agency: International Union of Pure and Applied Physics. Cosmic
Ray Commission.

Ed.: L.I. Dorman; Assistant Ed.: V.F. Tulinov; Editorial Board: G.B. Zhdanov
(Ed.-in-Chief), I.P. Ivanenko (Assistant-Ed.-in-Chief), N.M. Gerasimova,
A.I. Nikishov, V.I. Zatsepin, B.A. Khrenov, L.I. Dorman, V.F. Tulinov,
S.I. Syrovatskiy, V.M. Fedorov, Yu.N. Vavilov, and A.T. Abrosimov.

PURPOSE: This book is intended for physicists, astrophysicists, and other
scientists engaged in the study of cosmic rays.

COVERAGE: This is the fourth volume of a 4-volume work containing papers delivered
at the Moscow Cosmic Ray Conference held on July 6-11, 1959. This volume
contains 54 reports by Western and Soviet scientists on problems dealing with
variations of cosmic ray intensity. Only the reports delivered by Soviet and

Card 1/22 HUNGARIAN SCIENTISTS ARE ABSTRACTED.

Variations of Cosmic Ray Intensity

SOV/4152

II. METEOROLOGICAL EFFECTS OF COSMIC RADIATION AND COUPLING COEFFICIENTS

2. Dorman, L.I. On the Question of a Unified Procedure for Introducing Corrections for Meteorological Effects Into Data Obtained by Means of Meson Telescopes and Ionization Chambers

21-24

The author discusses the suggestions made by N. Parsons (Private communication), Lockwood, and Calawa (J. of Atm. and Terr. Phys., II, 23, 1957) regarding the procedure of introducing corrections to the barometer effect. He also analyzes the empirical and integral method currently used for introducing corrections to the temperature effect, and concludes that the integral method can serve as the basis for a unified procedure of calculating meteorological corrections.

4. Sandor, T., A. Somogyi, and F. Telbisz (Central Research Institute of Physics of the Hungarian Academy of Sciences, Budapest). Atmospheric Coefficients and Solar Daily Variation of the Cosmic Radiation Measured 18 m Underground

30-34

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Variations of Cosmic Ray Intensity

The authors evaluate the data on intensity variation of cosmic radiation for the period of March 1958 through March 1959. The station is situated in Budapest and has been operating since February 20, 1958.

5. Glikova, E. (Ye). Annual Variations of Cosmic Ray Intensity, and Temperature Corrections

The author examines the variations in mean monthly values of cosmic ray intensity in Moscow (1953-1957), Yakutsk (1953-1957), and Cheltenham (1942-1946). She determines that after the introduction of temperature corrections, calculated by the Dorman method, a regular seasonal wave with a summer maximum arises in Moscow and Yakutsk and no significant reverse wave in Cheltenham. She concludes that the reverse seasonal wave noticeable only at stations with large annual temperature variations is due to inaccurate utilization of the temperature coefficients in the calculation.

35-36

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82349

G/004/60/007/008/003/005
B015/B055**15.8000**

AUTHORS:

Dobó, J., Somogyi, A., Lakner, E.

TITLE:

Preparation of Colorable Polytetrafluoro Ethylene (PTFE)
Using Radiation-initiated Graft Polymerization

PERIODICAL: Plaste und Kautschuk, 1960, Vol. 7, No. 8, pp. 393 - 395

TEXT: The grafting of styrene on PTFE (Teflon) has already been investigated by Chapiro (Ref. 1). Restaino (Refs. 2,3) investigated the grafting of other polymers on the same material. For this, PTFE was dipped into the monomer, the polymer and the monomer then being exposed simultaneously to high-energy radiation. Sinitcina et al. (Ref. 4) applied a different method. In the present paper, the first-mentioned method was used. The authors used a 220 kv, 15 ma X-ray apparatus, or in some cases, a 60 curie Co⁶⁰ source. Styrene, methyl methacrylate, vinyl acetate, and vinyl pyridine were used as monomers. Irradiation was carried out in the absence of oxygen. Vinyl acetate was grafted most easily. Grafting on PTFE is accompanied by autoacceleration, i.e. the reaction rate increases with

Card 1/2

GEMESY, Tibor; SANDOR, Tomas; SOMOGYI, Antal

Investigation of the extensive air showers of cosmic radiation by the
Wilson chamber. Koz fiz kozl MTA 8 no.1:3-6 '60. (ERAI 10:1)

1. Kozmikus Sugarzasi Laboratorium, a Magyar Tudomanyos Akademia
Kozponti Fizikai Kutato Intezete.
(Cosmic rays) (Cloud chamber)

SANDOR, T.; SOMOGYI, A.; TELBISZ, F.

Atmospheric effects and periodicities of the cosmic radiation
measured 8m below ground. Acta phys Hung 11 no.2:205-207 '60.
(EEAI 9:10)

1. Central Research Institute of Physics, Budapest.
(Cosmic rays)

GALICZ, Tamas
SUCHYI, Given Names

Country: HUNGARY

Academic Degrees: [not given]
Cosmic Radiation Laboratory (Kozmikus Sugárzás Laboratórium) of the Central
Affiliation: Physics Research Institute (Központi Fizikai Kutató Intézet), Budapest. [Di-
rector: academician Lajos JANKÓSI.]
Sources: Budapest, Magyar Fizikai Folyoirat, No 1, 61, pp 51-60

Data: "Investigations of Extensive Cosmic-Ray Showers, at Depths Equivalent to Forty
Meters of Water."

Co-authors:

SCHÖTZI, Antal. (Affiliation same as above.)
TELDISZ, Ferenc. (" " " ")

6

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H/016/61/000/004/001/001
B122/B227

AUTHOR: Somogyi, Antal, Doctor (see Association)

TITLE: Results of the First International Geophysical Year in cosmic ray physics I.

PERIODICAL: Fizikai Szemle, no. 4, 1961, 121 - 128

TEXT: This is the first part of a paper read by the author at the out-of-town meeting of the Eötvös Loránd Physical Society held in Miskolc in 1960. This part of the paper deals with 1) technical facilities of research on cosmic radiation organized during the Geophysical Year in 1957 - 1958 and with 2) primary cosmic radiation. There are only five underground intensity recording stations in operation at Moscow, Yakutsk, Hobart (Tasmania), Halle a. d. Saale, and Budapest, the last one at the KFKI (Central Physical Research Institute). All but Halle are equipped with meson telescopes with GM tubes. The Moscow telescope has cubic geometry, the other three are half-cubic, the Budapest instrument is the largest (30 GM-tubes in one row, $a = 1264$ mm). On the Earth's surface 47 cubic telescopes were operated during the Geophysical Year. The

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Results of the First...

oldest intensity recording instrument is the integrating ionization chamber. The largest ones are used in the Soviet Union (0.95 cb. m). The latest surface instrument is the BF₃-neutron monitor with proportional counters, designed by J. A. Simpson^I(Ref. 2); during the Geophysical Year; they were installed at 52 places. All these instruments are used to advantage at higher elevations as well: up to 5 - 10 km altitude, in airplanes; at still higher altitudes, sets of GM-tubes or smaller ionization chambers are balloon-borne; between 30 - 45 km altitude, scintillators and photographic emulsions are applied. Ballistic rocket-borne photographic emulsions have attained some outstanding qualitative results, but artificial satellites and space rockets are most helpful for primary cosmic ray research. The greatest surprise of the Geophysical Year was the discovery of the Van Allen zones. For details on the discovery of the first (inner) zone by Explorer I and of the second zone by Pioneer III, reference is made to v. 10, no. 1 of FS. This paper summarizes latest data. Data on intensities are taken from a paper of J. Van Allen and L. A. Frank (Ref. 6). The energy spectrum of protons of the inner zone was measured by S. C. Freden and R. S. White

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Results of the First...

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(Ref. 7) by photographic emulsions sent to 1230 km altitude. Observations by Pioneer III and Lunik I (January 2, 1959) showed great fluctuations in the intensity and energy distribution of particles, depending on solar activity, in the outer zone, while the inner radiation zone was found to be very stable. Several researchers (Khristophilos, Kellogg, Singer, Vernov and coworkers attributed the inner zone to neutron-decay products produced in the atmosphere by primary cosmic rays and reflected back. The author does not find sufficient evidence for that. Particles in the outer zone probably originate from the sun, and particles of both zones are kept captured by the terrestrial magnetic field. The intensity of particles beyond the Van Allen zones was found by Lunik I to be constant in space. Measurements of Dolginov, Pushkov (Proc. of the Moscow Cosmic Ray Conf. (IUPAP), Vol III, p. 30, 1960) found that the Van Allen zones exerted great influence on the geomagnetic field. The great density of particles in the Van Allen zones, no doubt, influence the thermal balance of the Earth. If other planets possess magnetic fields, there must be radiation zones around them too. There are 3 tables, 5 figures and 12 references: 3 Soviet-bloc and 9 non-Soviet-bloc. The last two references to English-language publications read as follows: (6)

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J. A. Van Allen, L. A. Frank, Preprint No. 59 - 18, State University of Iowa, August 1959. (7) S. C. Freden, R. S. White, Phys. Rev. Letters, 3, 9, 1959.

ASSOCIATION: Kozponti Fizikai Kutatointezet, Budapest (Central Physical Research Institute, Budapest); Nehézipari Műszaki Egyetem, Miskolc (Technical University for the Heavy Industry, Miskolc)

Card 4/4

SANDOR, Tamas; SOMOGYI, Antal; TELBISZ, Ferenc

Investigation of extended air showers in 40 m. water-equivalent
depth. Magy fiz folyoir 9 no.1:51-60 '61. (EEAI 10:6)

1. Kozponti Fizikai Kutato Intezet, Kozmikus Sugarzasi Laboratorium.
(Cosmic rays)

H/016/61/011/005/001/001
B122/B227

3.2410

AUTHOR:

TITLE:

Somogyi, Antal, Doctor
Results of the first International Geophysical Year in
cosmic ray physics II
PERIODICAL: Fizikai Szemle, v. 11, no. 5, 1961, 155-159

TEXT: This is the second and last part of a lecture delivered by the author at the out-of-town meeting of the Eötvös Loránd Geophysical Society at Miskolc in 1960. This part deals with 1) solar, 2) geomagnetic and 3) meteorological influence on cosmic rays. Finally, 4) present knowledge on cosmic rays is summed up. The role of the Sun as space rocket source has long been debated. Recent measurements (Pioneer above 75 Mev energy level comes from the Sun. No increase in intensity of radiation was observed as the rocket approached the Sun by one tenth of the solar distance. As for the Sun as modulator of cosmic radiation, the Geophysical Year is credited for two important observations on the periodicity of cosmic radiation: a) The solar daily periodicity was

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Results of the first International ...

observed in the flux of cosmic particles of higher energy (10-30 Gev) as well. Simultaneous measurements of the laboratories of Chacaltaya (Bolivia, altitude 5,300 m) and of Budapest (Cosmic Radiation Institute of the Central Physical Research Institute) proved this. Similarly, the b) 27-day periodicity (recurrence) of the intensity of cosmic radiation was also found to occur at higher energy levels too, with the dying off of its amplitude in periods of 4-10 such 27 day intervals. Measurements of Tulinov and Charakhesyan (1957) and of the laboratories of Yakutsk and Budapest are mentioned. On the 11-year periodicity of the fluctuation of the intensity of cosmic radiation, referred to solar activity, the author presents measurements from a paper of S. E. Forbush (J. Geoph. Res. 59, 525, 1954 quoted in Dorman's "Variatsii kosmicheskikh luchey, Moscow 1957). 2) Measurements of Simpson and coworkers (Ref. 5) produced evidence that the Forbush effect and others held for "geomagnetic" are to be counted among solar modulatory effects. Dolginov and Pushkov measured with instruments of the I Soviet space rocket, at distances of 30,000-40,000 km from the Earth such feeble intensities of the geomagnetic field that exclude its notable influence on the cosmic ray flux. The Budapest laboratory measured Forbush effects at 47.5° latitude north and

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Results of the first International ...

at 40 m (water equivalent) depth where geomagnetic perturbations can influence only the entering of particles of less than 2-3 Gev energy or where only particles of more than 15 Gev energy can penetrate. 3) During the Geophysical Year, the Budapest laboratory measured the influence of meteorological factors on the intensity of cosmic radiation by the correlation method. 4) As for the physical mechanism that accelerates particles to the fantastic energies observed, the author finds the most promising explanation in the supernova theory (Ref. 6). Galactic origin is most frequently supposed for the location of that mechanism. The plenary session of the special committee of the International Geophysical Year held in Moscow prolonged its scientific program under the name of "International Geophysical Cooperation 1959". The ICSU, at its session in The Hague, in November 1959, constituted the permanent Comité International de Géophysique. There are 3 figures and 6 non-Soviet-bloc references. The three references to English-language publications read as follows: (1) C. Y. Fan; P. Meyer; J. A. Simpson, Phys. Rev. Letters, 5, 272, 1960; (5) Idem, 4, 421, 1960; (6) Paper of V. L. Ginzburg, J. G. Wilson, S. A. Wouthuysen: Progress in Elementary Particle and

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Results of the first International ...

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B122/B227

Cosmic Ray Physics, vol IV, p. 390.

ASSOCIATION: Központi Fizikai Kutató Intézet, Budapest (Central Physical Research Institute, Budapest); Nehézipari Műszaki Egyetem, Miskolc (Technical University for the Heavy Industry, Miskolc)

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27181
S/056/61/041/002/002/028
B102/B205

3.24/0

AUTHORS: Sándor, T., Somogyi, A., Telbisz, F.

TITLE: The muon energy spectrum in extensive atmospheric showers

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 41,
no. 2(8), 1961, 334 - 336

TEXT: The authors report on experimental investigations of the muon energy spectrum in extensive atmospheric showers, which were started in 1960. The experiments were performed at a depth of 40 m water equivalent (18 m of soil plus 15 cm of lead) and also on sea level, using the experimental arrangement shown in Fig.1. Fig.1b indicates that the blocks S, S₁, and S₂ were equipped with a double layer of 30 counters each.

Sixfold coincidences were recorded. From a total of 1464 recorded showers, the count rate was calculated to be

$$c_6 = 1.93 \pm 0.05 \text{ hr}^{-1}$$

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B102/B205

The muon energy spectrum...

This result was compared with the count rate of a fourfold coincidence (Fig.2) on sea level under 20-cm layer of lead ($C_4 = 0.29 \pm 0.01 \text{ hr}^{-1}$).

This was done to obtain data on the muon energy spectrum. Conclusions: The shower intensity on the surface under a 20-cm layer of lead was higher by a factor of (4.1 ± 1.1) than it was at a depth of 40 m water equivalent. Denoting the mean muon density on the surface under a 20-cm layer of lead by x , and that a depth of 40 m water equivalent by px , one obtains

$$\frac{C}{C_0} = \int_0^{\infty} (1 - e^{-sx})^3 x^{-\gamma_1-1} dx / \int_0^{\infty} (1 - e^{-spx})^3 x^{-\gamma_2-1} dx, \quad (1)$$

where $S = 1.44 \text{ m}^2$; γ_1 and γ_2 are the exponents of the muon density spectrum; $\gamma_1 = 1.89 \pm 0.17$, $\gamma_2 = 2.2 \pm 0.2$; $p = 0.47 \pm 0.07$. This means that at a depth of 40 m water equivalent, the muon flux density will be

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The muon energy spectrum...

S/056/61/041/002/002/028
B102/B205

about half as high as on the surface under a 20-cm layer of lead. For the muons one finds $F(>E) E^{-\alpha}$, where $\alpha = 0.46 \pm 0.09$. There are 2 figures, 1 table, and 7 references: 6 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy fiziki Akademii nauk Vengerskoy NR, Budapesht (Central Scientific Research Institute of Physics of the Academy of Sciences of the Hungarian People's Republic, Budapest)

SUBMITTED: February 21, 1961 (initially), May 19, 1961 (after revision)

Card 3/3

SOMOGYI, Antal

The expected value of the number of counters discharged in
an extensive air shower apparatus. Koz fiz kozl MTA 10 no.4:
251-268 '62.

SOMOGYI, Antal

On the 50th anniversary of the discovery of cosmic
radiation. Fiz szemle 12 no.5:133-138 My '62.

J. Magyar Tudomanyos Akademia Kozponti Fizikai
Kutato Intezete, Budapest, es "Fizikai Szemle"
szerkeszto bizottsagi tagja.

SANDOR, T.; SOMOGYI, A.

Density spectrum of extensive air showers measured under moderate and large thicknesses of lead. Act phys Hung 14 no.1:39-44 '62.

1. Central Research Institute of Physics of the Hungarian Academy of Sciences, Laboratory for Cosmic Rays, Budapest. Presented by Lajos Janossy.

SOMOGYI B., DUBECZ S., LUTANY G.

Csontpor ételeinek hatása kísérleti állatok callus-képződésre.
/Effect of feeding of pulverized bone on experimental callus pro-
duction/ Orv. hetil., Budapest 92:27 8 July 51 p. 874-7.

1. Doctors. 2. First Surgical Clinic (Director--Prof. Dr. Gyula Sebesteny), Institute of Anatomy (Director--Prof. Dr. Ferenc Kiss), and Second Surgical Clinic (Director--Prof. Dr. Endre Hadri), Budapest Medical University.
CLML Vol. 20, No. 10 Oct 1951

KALABAI, Laszlo, dr.; SOMOGYI, Barnabas, dr.; VILLANYI, Gyorgy, dr.

Important surgico-anatomical data with reference to the pancreatic
surgery. Magy. sebeszet 7 no.6:427-434 Dec 54.

1. A Budapesti Orvostudomanyi Egyetem Sebeszeti Anatomia es
Mutettani Intezetenek kozlemenye: Igazgato: Nagy Denes dr. egyet.
tanar.

(PANCREAS, anat. & histol.)
(PANCREAS, surg.)

SOMOGYI, B.

Surgical anatomy of the subpectoral region. Acta morph. hung.
5 no.1-2:25-36 1955.

1. Institut d'anatomie chirurgicale et de medicine operatoire
de l'Universite Medicale de Budapest (Directeur: D. Nagy, pro-
fesseur agrégé).

(THORAX, anatomy and histology,
surg. anat. of subpectoral region)

SOMOGYI, Barnabas, dr.; RARABASNE, Perodi Gizella, dr.

Prevention of adhesions leading to intestinal obstruction. Nagy.
sebeszet 8 no.145-208:198-201 June 55.

1. Budapesti Orvostudomanyi Egyetem Sebeszeti Anatomiai es Mitettani
Intezetenek kozlemenye. Igazgato: Nagy Denes dr. egyet. docens.

(INTESTINES, SMALL, surg.,
exper., for prev. of adhesions leading to intestinal
obstruct. in dogs)

(INTESTINAL OBSTRUCTION, prev. and control,
exper. surg. in dogs)

SOMOGYI, Barnabas, dr.

Chapters of the history of anatomic illustration. Orv.
hetil. 96 no.52:1444-1447 25 Dec 55.

1. A Budapesti Orvostudomanyi Mgyeszteti Sevezeteti Anatomiai es
Mutettani Intezetek (igazgato: Magy Denes dr.) kozl.

(ANATOMY
illustrations, hist. (Hun))

(ART, MEDICAL
anat. illustrations, hist. (Hun))

SOMOGYI, Barnabas, dr.; FURKA, Sandor, dr.; ZSEBOK, Zoltan, dr.

Results of late clinical and roentgentomographic examinations in
dorsolumbar spine fractures. Orv. hetil. 98 no.28:763-768 14 July
57.

1. A Budapesti Orvostudomanyi Egyetem III. sz. Sebeszeti
Klinikajának (igazgató: Rubanyi, Pal, dr. egyet. tanár)
Mutettani Intézeténél (igazgató: Nagy, Dezső, dr. egyet.
tanár) és az I. sz. Sebeszeti Klinika (igazgató: Hedri, Endre,
dr. egyet. tanár) Röntgenosztályának közleménye.

(SPINE, fract.
dorsolumbar, clin. & tomographic follow-up (Hun))

HUTL, Tivadar, Dr.; SOMOGYI, Barnabas, Dr.

The role of ACTH and vitamin E in the prevention of abdominal adhesions.
Orv. hetil. 99 no.10:348-350 9 Mar 58.

1. A Budapesti Orvostudomanyi Egyetem I. sz. Sebeszeti Klinika janak
(ignazgato: Hedri Endre dr. egyet. tanar) es Sebeszeti, Anatomiai es
Mutettani Intezetenek (ignazgato: Nagy Denes dr. egyet. tanar) kozlemenye.

(ABDOMEN, surg.
postop. adhesions, eff. of ACTH & vitamin E on develop. (Hun))

(ACTH, eff.

on develop. of postop. abdom. adhesions (Hun))

(VITAMIN E, eff.

same)

HUTTL, Tivadar, Dr.; E-SZABO, Leeszlo, Dr.; SUMOGYI, Barnabas, Dr.

Influence of hyaluronidase on abdominal adhesions. Orv. hetil.
99 no.12:399-401 28 Mar 58.

1. A Budapesti Orvostudomanyi Egyetem I. sz. Sebeszeti Klinikajának
(igazgató: Hedri Endre dr. egyet. tanár) és Sebeszeti Anatomiai és
Mutattani Intézetek (igazgató: Nagy Dénes dr. egyet. tanár)
közleménye.

(ABDOMEN, surg.
postop. adhesions, eff. of hyaluronidase on develop. (Hun))
(HYALURONIDASE, eff.
on develop. of postop. abdom. adhesions (Hun))

HUTTL, Tivadar, dr.; SOMOGYI, Barnabas, dr.

Effect of periton on experimental adhesions in the abdominal cavity. Orv.hetil. 100 no.46:1658-1659 N '59.

1. A Budapesti Orvostudomanyi Egyetem I. sz. sebészeti klinikájának (igazgató: Hedri Endre dr. egyet. tanár) és Sebészeti Anatomiai és Mutattani Intézetének (igazgató: Nagy Dezső dr. egyet. tanár) kozleménye.
(POLYVINYLOPYRROLIDONE pharmacol)
(ADHESIONS exper)

HUTTL, Tivadar, dr.; SZABO, Laszlo, dr.; SOMOGYI, Barnabas, dr.

Acetylation properties of the organism with special reference
to liver diseases. Orv.hetil. 100 no.48:1720-1722 N '59.

1. A Budapesti Orvostudomanyi Egyetem I. sz. Sebeszeti
klinikajának (igazgató: Hedri Endre dr. egyetemi tanár)
és Sebeszeti Anatomiai és Mutattani Intézeténnek (igazgató:
Nagy Denes dr. egyetemi tanár) közlésnye.
(LIVER DISHASES metab)
(BENZOACRS metab)

HUNGARY

SOMOGYI, Dr Barnabas, of the Institute of Anatomy and Surgery (Anatomiai és Mutattani Intézet) of the Budapest College of Medicine (Budapesti Orvostudományi Egyetem).

"Structure and Traumatological Significance of the Lumbar Vertebrae"

Budapest, Magyar Traumatologia, Orthopaedia es Helvrealitio Székeszet,
Vol 6, No 3, 1963; pp 161-170.

Abstract [Author's English summary]:

The author made his investigations upon 300 dry human vertebrae and on the lumbar regions of the spinal column of 30 fresh corpses. Besides the known osseous trabecular systems of the bones the horizontal and sagittal trajectories are described in the paper too. The author explains the more frequent injury of the upper end-plate with the Langerhans' trabeculae making the lower end-plate more resistant. The "butterfly" fracture is made possible by Gallois-Japiot's inclined trajectories. The frequent ventral compression occurs in the "ventral triangle" which is the most deficient in osseous trabeculae and lime. In craniocaudal radiologic pictures semicircular zones were observed in the intact vertebral body (zona peripheralis, intermedia, centralis and vasicularia-dorsalis), consisting from trajectories. In pathological cases (e. g. spondylosis) this system disappears. The zona centralis is adjacent to the nucleus pulposus. The V-shaped infractions were observed at this place by the author. The infractions occur on several segments but on typical roentgenograms they remain concealed. The clinics of these lesions are not cleared up so far.

[→ references, mainly Western].

1/1

BALOGH, Janos, dr.; LISZKA, Gyorgy, dr.; SOMOGYI, Bela, dr.

Stenosis of the duodenum caused by renal ptosis. Orv. hetil.
101 no. 12:417-418 20 Mr '60.

1. Budapesti Janos Korhaz-Rendelointezet.
(DUODENUM dis.)
(KIDNEY DISEASES compl.)

HALMOS, Tamas, dr.; SOMOGYI, Bela, dr.

Investigation on the correlation between human saliva and carbohydrate metabolism. Magy. belorv. arch. 15 no.6:220-223 D '62.

1. Fovarosi Tanacs Janos korhaz I. belosztaly es BMO osztaly kozlemenye.
(DIABETES MELLITUS) (HYPOGLYCEMIA) (SALIVA)
(BLOOD SUGAR) (CARBOHYDRATE METABOLISM)

PASTINSZKY, Istvan, dr.,; SOMOGYI Dezso, dr.,; RACZ, Istvan, dr.

Jarisch-Hersheimer reaction in lesions of the nervous system,
liver & kidneys. Borgyogy. Vener. szemle 9 no.4:122-126 July 55

(SYPHILIS

Jarisch-Herxheimer reaction causing changes in NS,
liver & kidneys)

JANÓCZI L., KUBIK I., VÁRÁNDI J.

Anat. Inst. med. Univ., Budapest. "Néhere Beiträge zur Neuroregulation des Leberkreislaufs. Recent data on neuro-regulation of the hepatic circulation ACTA PHYSIOLOG. ACAD. SCIENT. HUNG. (Budapest) 1954, 5/suppl. (60)

SO: EXCERPT: UTMCA, Section II Vol. 7 No. 11

SC/MUG-VI-E

Histochemical changes in the renal parenchyma after compression of the renal artery in the dog. E. Somogyi, T. Donath, and J. Balint (Janos Battala Gynaecol. Hosp., Budapest). *Acta Morphol. Acad. Sci. Hung.* 7, 1-14 (1958)

(in English).—Effects of compression of the right renal artery in dogs for from 2 to 120 min. were observed by noting changes in capillarization, lipides, nucleoproteins, acid and alk. phosphatases, juxtaglomerular complex, and parenchyma. The dogs were sacrificed from 1 to 14 days following compression, the kidneys removed and worked up histochemically, the left kidney serving as a control. Although extensive functional alterations, shown only by finer histochem. methods, appeared in the parenchyma when compression was under 30 min., 30 min. was required to induce changes demonstrable by the usual histological methods. The first and most conspicuous changes appeared in the upper tubular system of the renal parenchyma. Changes demonstrable solely by histochem. methods were normalized in 3 to 5 days while morphological changes also revealed histologically did not regenerate within 14 days. A decline of alk. phosphatase activity occurred parallel with an accumulation of lipides, demonstrated by staining to be phospholipides, in the area of Henle's Loop and of the upper convoluted tubules.

B. Neidig

SOMOGYI, Emil, dr., DONATH, Tibor, dr.; BALINT, Jozsef, dr.

Histachemical changes in the parenchyma of the kidney following compression of the renal artery in dogs. Magy. sebeszet 9 no.5: 322-330 Oct 56.

1. A Budapesti Fovarosi Tanacs "Balassa Janos" Korhaza Szuleszettinogyogyaszati osztalyanak (Foervos: Dr. Orban Gyorgy), a Budapesti Orvostudomanyi Egyetem Anatomiai Intezetenek (Igasgato: Dr. Kiss, Ferenc egyet. tanar) es a Budapesti Fovarosi Tanacs Janos-korhaza Urologiai Osztalyanak (Foervos: Dr. Noszkay, Aurel) kozlemenye.

(KIDNEYS, blood supply
eff. of compression of renal artery on histochem.
composition & activity of kidney parenchyma in dogs (Hun))

SOMOGYI E.

ORBÁN, D'yerd' [Orbán, D.] (Budapesht); SHOMOD'I, Emil [Somogyi, E.]
(Budapesht); DONAT, Tibor [Dónat, T.] (Budapesht)

Examination of cyclical changes in the vaginal secretion by
means of fluorescent microscopy. Akush. i gin. 33 no.5:111-
112 S-0 '57. (MIRA 12:5)

(OVULATION

cyclical change exam. by luminescent microscopy
of vaginal secretion)

(VAGINA, physiol.

determ. of ovulation cycle by luminescent
microscopy of vaginal secretion)

SOMOGYI, Endre, dr.

Pulmonary changes in sudden death in infant. Gyermekgyogyassat
5 no.12;372-376 Dec 54.

1. A Budapesti Orvostudomanyi Egyetem Igazsagugyi Orvostani
Intezetenelek (igazgato: Incze Gyula dr. "egyetemi tanar")
korlemeanya.

(LUNG, pathol.
after sudden death in inf.)

(DEATH, SUDDEN
lung pathol. in inf. after)

SOMOGYI, Endre, dr.

Hydronephrosis in infants diagnosed as congenital megacolon.
Gyermekekgyogyaszat 6 no.4:126-128 Apr 55.

1. A Budapesti Orvostudomanyi Egyetem Igazsagugyi Orvostani
Intezetenek (igazgato: Incze Gyula dr. egyetemi tanar) kozlemenye.
(HYDRONEPHROSIS, in infant and child
differ. diag. from congen. megacolon)
(MEGACOLON
congen., differ. diag. from hydronephrosis in inf.)

SOKOYI, J.; TAKATI, L.

Investigation of the problem of connection between sudden death in infancy
and change in weather. p. 375.
(Idojaras. Vol. 60, no. 6, Nov./Dec. 1956., Hungary)

SO: Monthly List of East European Accessions (FEAL) LC, Vol. 6, No. 6, June 1957. Uncl.

SOMOGYI, Endre, Dr.

Surgical aspects of stab wounds of the heart in the practice of
medicolegal experts. Magy. sebeszet 11 no.2:86-92 Apr-June 58.

1. A Budapesti Orvostudomanyi Egyesem Igazsagugyi Orvostani Intezetenek
Kozlemenye Igazgato: Okros Sandor dr. egyetemi tanar.
(HEART, wds. & inj.
stab wds., surg. aspects (Hun))

OROVCEZ, Bela, dr.; IRANYI, Jeno, dr.; SOMOGYI, Endre, dr.

Preventive measures for protecting employees working in
electromagnetic fields. Munkavedelem 6 no.4/6:34-39
'60.

1. Orszagos Mentoszolgatal; Orszagos Rheuma es
Furdougyi Intezet Fizikotherapias Jarobetegrendelete;
Budapesti Orvostudomanyi Egyetem Igazsagugyi Orvostani
Intezete.

IRANYI, Jeno, dr.; OROVECZ, Bela, dr.; SOMOGYI, Endre, dr.

Disorders of the vegetative nervous system caused by complex of physical factors. Orv.hetil. 101 no.27:941-945 3 Jl '60.

1. Orszagos Reuma- es Furdougyi Intezet, Orszagos Menteszolgatalat, Budapesti Orvostudomanyi Egyetem, Igazaagugyi Orvostani Intezet.
(AUTONOMIC NERVOUS SYSTEM dis.)

TURAI, L.; SOMOGYI, E.; CSERHATI, E.; KELEMEN, J.

On acute alcohol poisoning in infancy. Acta paediat. acad. sci. Hung.
2 no.2:137-148 '61.

1. I. Kinderklinik und Institut fur Gerichtliche Medizin der
Medizinischen Universität Budapest.
(ALCOHOLIC INTOXICATION in infancy and childhood)

TURAI, Laszlo, dr.; SOMOGYI, Endre, dr.; CSERHATI, Endre, dr.; KELEMEN,
Jozsef, dr.

Acute alcoholic intoxication in childhood. Gyermekgyogyaszat
12 no.2:41-48 F '61.

1. A Budapesti Orvostudomanyi Egyetem I. sz. Gyermekklinikajának
(Igazgató: Dr. Gegesi Kiss Pal akadémikus, egyetemi tanár) és
Igazságügyi Orvostani Intézeténnek (Igazgató: Dr. Okros Sándor
egyetemi tanár) munkája.
(ALCOHOLIC INTOXICATION in inf & child)

SCHMIDGYI, Endre
SURNAME (in caps); Given Name(s)

(2)

Country: Hungary

Academic Degrees: Dr

Affiliation: Forensic Medical Institute of the Medical University of
Budapest (A Budapesti Orvostudományi Egyetem Igazságügyi
Intézete)

Source: Budapest, Orvoképzés, Vol XXXVI, No 5, Oct 1961, pp 349-361

Data: "Modern Trends and Views in the Forensic Medical Investigation
of Traffic Accidents."

KENYERES, Imre, dr.; POTONDI, Andras, dr.; SOMOGYI, Endre, dr.

Fatal accidents in children in Budapest and Pest regions from 1957
to 1959. Orv. hetil. 102 no.40:1879-1882 10 '61.

1. Budapesti Orvostudomanyi Egyetem, Igazsagugyi Orvostani Intezet.

(ACCIDENTS in inf & child)

HUNGARY

KOZMAI, Mihaly, Dr.; POTHORN, Andras, Dr.; KOLHAY, Lajos, Dr.; PAF, Zoltan,
The First Medical University of Budapest (Budapesti Orvostudomanyi Egyetem)
Department of the Medical Institute of the Department of Justice and of
the National Ambulance Service (Magyarorszagi Orvestani Intezet es Orszagos
mentosaligat Szekreanya)

Coronary Thrombosis of the Young.⁷

Budapest, Orvosi Hetilap, Vol 104, No 1, 6 Jan 63, pages 19-21.

Abstract: The authors report on 20 cases of coronary thrombosis in patients under 35. Most of the patients had no or only indefinite neurotic complaints before the attack. Autopsy reports showed atherosclerotic changes in the coronary arteries in all cases and hypertrophy of the heart in many cases.

[ref 10 references about 20 are Western, 7 Soviet-block]

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POGATSA, Gabor, dr.; KALDOR, Antal. dr.; SOMOGYI, Endre, dr.; BELLUS,
Erzaebet.

Effect of insulin, bucarban and 2 desoxy-D-Glucose on alcoholic
intoxication in animals. Orv. hetil. 105 no.10:442-445; 10 Mr'64.

1. Budapesti Orvostudomanyi Egyetem, II. Belklinika es Igazsa-
gugyi Orvostani Intezet.

HUNGARY

SZEGECI, Endre, Cand. of med. sci.; Medical University of Budapest, Institute of Forensic Medicine (Budapesti Orvostudomanyi Egyetem, Igazsagugyi Orvostani Intezet).

"Electropathological Studies From the Aspect of Forensic and Social Medicine."

Budapest, A Magyar Tudomanyos Akademia V. Orvosi Tudomanyok Osztalyanak Kozlemenyei, Vol XVI, No 2-3, 1965, pages 253-274.

Abstract: The article was delivered at a memorial lecture. The effect of an electric current on various parts of the human body, especially on the nervous system, and the essential and noticeable differences between the effect of a stroke by lightning and by electricity are discussed. Some statistical data are presented concerning the rate of suicide by electrocution and their sociological evaluation led to the conclusion that a certain epidemic-like accumulation can be noted in these cases just as in other types of suicide. Prolonged exposure to electromagnetic waves was found to have some effect on humans, manifested by increased excitability of the nervous system and fatigue. Suggestions were made to alleviate this effect among the technical personnel of radio and radar stations. Some histological pictures are presented indicating the changes produced in lesions caused by electricity. Ultrastructural studies of such lesions were also carried out but are not reported in the article. [Manuscript received 23 May 65]

SZABÓ, L.; V. M., G.; SZEKEY, P.

Polychemical and fluorescence-optical investigations of marks
of electric injury. Acta morph. accl. sci. Hung. 13 no.4:311-
319 '65.

J. Institut für gerichtliche Medizin der Medizinischen Universität (Direktor: Prof. Dr. S. Okros), Budapest. Submitted
March 27, 1964.

Forensic Medicine

HUNGARY

SOMOGYI, Endre, Dr., SZUCHOVSZKY, Gyula, Dr; Medical University of Budapest,
Institute of Forensic Medicine (director: OKROS, Sandor, Dr) Budapesti Orvos-
tudomanyi Egyetem, Igazsagugyi Orvostani Intezet).

"The Role of Public Authorities in the Autopsy of Those Who Die in Hospitals
and Clinics."

Budapest, Orvosi Hetilap, Vol 108, No 8, 19 Feb 67, pages 359-363.

Abstract: [Authors' Hungarian summary modified] Some problems of unexpected deaths occurring among hospitalized patients are discussed on the basis of the relevant legal regulations. In the case of unexpected death, the autopsy must be performed by public authorities the duty of whom is the examination and evaluation of an eventual responsibility for the death. Unexpected deaths are defined as those where the thought of responsibility may arise. Some examples are cited and the cases are discussed in accordance with the legal regulations in the following grouping: a) deaths related to violence, b) unexplained deaths in the course of or because of the lack of medical treatment, c) unexplained deaths, d) some questions related to the practice of hospitalization which may arise in cases when an unknown person is found dead. The procedure to be followed in the case of unexpected death is described including the duties of individual professionals and the so-called reporting-back requirement from the physician who performs the autopsy. As general requirements of the procedure rapidity and good documentation are listed. All

OROVECZ, Bela, dr.; IRANY, Jeno, dr.; SOMOGYI, Endre, dr.

Are radio-frequency electric waves harmful? Musz elet 15 no.12:6
Je '60. (EEAI 9:9)
(Electric waves) (Radio)

SOMOGYI, Erno

Maintenance problems of the Series No. M 31 diesel hydraulic locomotives. Vasut 12 no. 5:14-15 31 My '62.